

REMARKS

In view of the above amendments and the following remarks, reconsideration is respectfully requested.

I. Amendments to the Claims

New claim 42 has been added to depend from claim 1.

II. Telephone Interview

The Applicant would like to thank Examiner Nooristany and his supervisor for granting and conducting a telephone interview on June 17, 2009 in connection with the above-identified application.

During the interview, the Examiner agreed that, if arguments similar to those discussed during the interview are presented in the form of a response, then the current prior art rejections will be withdrawn. The Applicant would like to thank the Examiner for such an indication.

As a result, arguments similar to those discussed during the interview are provided below in order to overcome the prior art rejections.

III. 35 U.S.C. § 103(a) Rejection

Claims 1, 4-27, 29, 33 38 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Moyer et al. (U.S. 2002/0103898), Sen (draft-sen-midcom-fw-nat-01.txt), Humpleman et al. (U.S. 6,466,971) and Goh (U.S. 6,373,841). This rejection is believed clearly inapplicable to independent claims 1, 27, 29, and 38 and the claims that depend

therefrom for the following reasons.

Claim 1 recites a home terminal apparatus connected to a router via a home network, wherein the home terminal apparatus includes a packet generation unit, a protocol determination unit, and a communication unit. In addition, claim 1 recites that

“ ... when said communication unit receives, from the server apparatus, a notification packet indicating an occurrence of a control request to control said home terminal apparatus while said communication unit is repeating the sending, using the UDP, of the address notification packet on a periodical basis [see (i) and (ii) below]; said packet generation unit is operable to generate a connection request packet, which is a packet for making a connection request to establish a TCP connection to the server apparatus [see (iii) below]; said protocol determination unit is operable to determine that the connection request packet is to be communicated using the second communication protocol which is the TCP [see (iv) below]; and said communication unit is operable to send the connection request packet to the server apparatus using the TCP, and operable to receive, from the server apparatus, control packet data, which is data including the control request in the TCP after the connection is established between the server apparatus and said home terminal apparatus using the second communication protocol which is the TCP [see (v) and (vi) below]”

In other words, based on the structure required by claim 1, the following events occur in the following order:

- (i) The communication unit periodically/repeatedly sends (to server) ADDRESS NOTIFICATION PACKET using **UDP** protocol;
- (ii) Server sends (to communication unit) NOTIFICATION PACKET (this is a

control request to control the home terminal apparatus);

- (iii) (When “ii” occurs while “i” is also occurring, that is “i” and “ii” are a trigger for “iii” to occur) the packet generation unit generates CONNECTION REQUEST PACKET (this is a request to establish a TCP connection);
- (iv) The protocol determination unit determines that the CONNECTION REQUEST PACKET is to be sent using **TCP**;
- (v) The communication unit transmits (to the server) the generated CONNECTION REQUEST PACKET using **TCP**; and
- (vi) The communication unit receives (from the server) CONTROL PACKET DATA using **TCP**.

In view of the above, it is clear that, UDP is used for sending the address notification packet repeatedly, and, once the notification packet is received by the communication as a “trigger,” TCP is used for sending the connection request packet and the control packet data (UDP is a “lightweight” protocol that is used for transmitting the address notification packet data, and TCP is a more “reliable” protocol that is used for sending/receiving control information, which provides a more efficient balance between reducing a communication load and improving communication reliability).

Moyer, Humpleman, Sen and Goh, or any combination thereof, fails to disclose or suggest the above-mentioned distinguishing features, as required by claim 1.

Initially, it is noted that Moyer and Humpleman were relied upon for disclosing the above-mentioned distinguishing features. However, Humpleman merely teaches that “if a UDP protocol is not available, a TCP protocol can be used for high bandwidth connections such as

IEEE 1394” (see col. 17, lines 42-44).

Thus, in view of the above and as agreed to by the Examiner, although Humpleman teaches utilizing TCP if UDP is not available, Humpleman still fails to disclose or suggest that (i) the communication unit repeatedly sends (to server) the ADDRESS NOTIFICATION PACKET using **UDP** protocol, (ii) the server sends (to communication unit) the NOTIFICATION PACKET (this is a control request to control the home terminal apparatus), (iii), when “ii” occurs while “i” is also occurring, the packet generation unit generates the CONNECTION REQUEST PACKET (this is a request to establish a TCP connection), (iv) the protocol determination unit determines that the CONNECTION REQUEST PACKET is to be sent using **TCP**, (v) the communication unit transmits (to the server) the generated CONNECTION REQUEST PACKET using **TCP**, and (vi) the communication unit receives (from the server) CONTROL PACKET DATA using **TCP**, as required by claim 1.

In other words, Humpleman merely teaches using TCP out of necessity when UDP is not available, but fails to disclose or suggest that, UDP is used for sending the address notification packet repeatedly, and, once the notification packet is received by the communication as a “trigger,” TCP is used for sending the connection request packet and the control packet data (UDP is a “lightweight” protocol that is used for transmitting the address notification packet data, and TCP is a more “reliable” protocol that is used for sending/receiving control information, which provides a more efficient balance between reducing a communication load and improving communication reliability), as required by claim 1.

Now turning to Moyer, it is submitted that Moyer merely teaches that a request can be sent using UDP, TCP or SCTP, wherein reliability is guaranteed over UDP (see paragraph

0054]). Thus, in view of the above, it is apparent that Moyer teaches the ability to use various transfer protocols, but fails to disclose or suggest above-described distinguishing features (i) – (vi), as required by claim 1.

Therefore, because of the above-mentioned distinctions it is believed clear that claim 1 would not be obvious or result from any combination of Moyer, Sen, Humpleman and Goh. Furthermore, there is no disclosure or suggestion in Moyer, Sen, Humpleman and Goh or elsewhere in the prior art of record which would have caused a person of ordinary skill in the art to modify Moyer, Sen, Humpleman and/or Goh to obtain the invention of independent claim 1. Accordingly, it is respectfully submitted that independent claim 1 and claims 4-26 and 42 which depend therefrom are clearly allowable over the prior art of record.

Amended independent claims 27, 29, and 38 are directed to a system, method, and program, respectively and each recite features that correspond to the above-mentioned distinguishing features of independent claim 1. Thus, for the same reasons discussed above, it is respectfully submitted that independent claims 27, 29, and 38 and claim 39 which depends therefrom are allowable over Moyer, Sen, Humpleman and Goh.

IV. Conclusion

In view of the above and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully submitted,

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